# **boD UID Implementation Plan for Maintenance Depots**

Department of Defense Unique Identification (UID) Implementation Plan

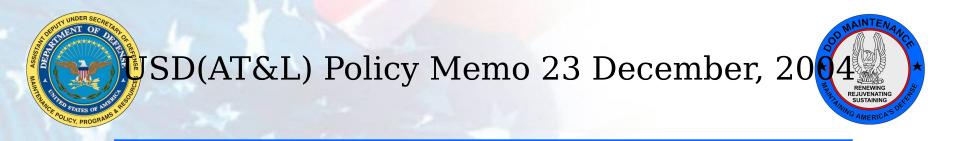
DoD Maintenance Depots



May 2005

Prepared by the Office of the Secretary of Defense Materiel Readiness and Maintenance Policy

Steve Heilman, LMI
ADUSD(MR&MP) UID IPT Meeting
2-3 June, 2005



Milestone	Responsibility	Q1 FY05 Q2 FY05	Q3 FY 05	FY06	FY 07	FY 08 FY 09	FY10	FY11
Quality Assurance Plan for UID	DCMA	J an-05						
OSD UID Budget Guidance to Components	OSD AT&L		Apr-05					
Legacy UID Implementation Plan for DoD Depots	OSD L&MR		May-05					
UID Program Plans (ACAT 1D)	Pgm Mgr		J un-05					
IOC Legacy Marking Capability at Pilot Organic Depots	Military Departments		J u	-05				
FOC UID CONOPS for DoD Maintenance	OSD L&MR			Dec-05				
UID Program Plans (All Programs)	Pgm Mgr/Item Mgr			J an-06				
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All Existing Serialized Assets Entered in UID Registry	Pgm Mgr/Item Mgr				Sep-07			
FOC Legacy Marking Capability at All Organic Depots	Military Departments				Sep-07			
Complete UID Marking of All Legacy Items	Pgm Mgr/Item Mgr						D€	ec-10

= Program Office Plans = Maintenance Community Plans



### Plan Contents



- Chapter 1: Introduction
- Chapter 2: Preparing for UID Capability Establishment
- Chapter 3: Establishing Depot UID Capability



## Chapter 1: Introduction

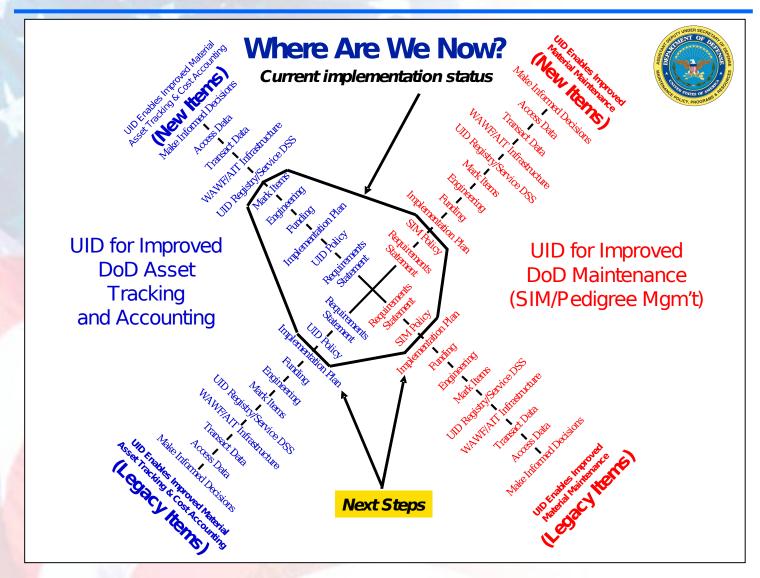


- Purpose and Vision for UID
  - CFO Act, FASAB Standards and GAO Reports
  - OSD UID Program
- Application of UID Technology
  - Improving Inventory Management and Cost Accounting Capabilities for New Items
  - Improving Inventory Management and Cost Accounting Capabilities for Legacy Items
  - Improving Materiel Maintenance Capabilities for New Items
  - Improving Materiel Maintenance Capabilities for Legacy Items



## Application of UID Technology







# Chapter 2: Preparing for UID Capability Establishment



- OSD Policy Flowdown to DoD Depots
- Depot UID Planning and Resourcing
  - Planning Challenge
    - IOC
    - FOC
  - Resourcing Challenge



## OSD Policy Flowdown to DoD Depots



- Standardized Policy
  - Common Doctrine
  - Common Business Rules
  - Common Data
     Formats & Transaction
     Protocols
    - "Plug & Play"
  - Duplication of Effort Reduced
  - Opportunity for Economonies of Scale with Investments

- Non-Standard Policy
  - Flexible Doctrine
  - Optimized Business Rules
  - Dissimilar Data
     Formats & Transaction
     Protocols
    - No "Plug & Play"
  - Duplication of Effort More Likely
  - Reduced Economonies of Scale



## OSD Policy Flowdown to DoD Depots



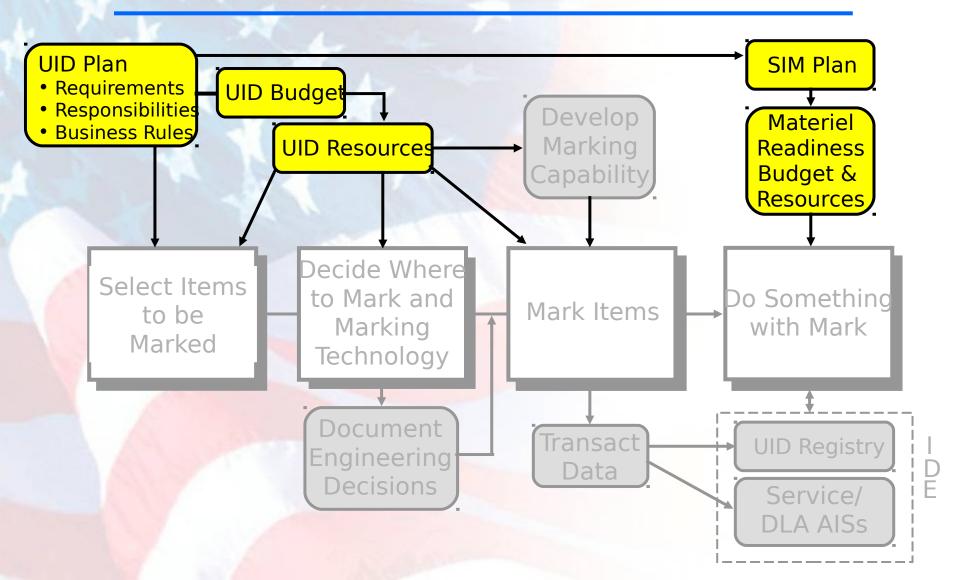
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Recommended for Cross-Service Maintenance UID Implementation

# pot UID Planning and Resourcing



#### Joint PMO-Depot UID IPT

#### **Engineering WIPT**

- AIS/Data Base WIPT
- **Production WIPT**

- Create list of parts
- Prioritize
- Marking Method
  - label plate
  - DPM
- Marking Location
- Drawing Changes
  - Add marking to repair SPECs
- Manage engineering costs

- Understand Rqm't- UID/SIM
- Map "as is" AIS
- Gap Analysis
- Design new serial number schema
- Document new data mgm't processes
- Define marking control
- Define external interfaces
- Manage IT costs

- Reconfigure Shops
- Integrate UID AIS
- Mark parts
  - QA mark
  - UID data to AIS
- CPI w/ UID data
  - Repair/rework
  - Parts marking
- Manage production costs

These three processes need to take place collaboratively and in parallel

# pot UID Planning and Resourcing

- Joint PMO/Depot UID IPT required at each maintenance depot...for each weapon system.
  - Matrixed support from depot employees and Program Office employees.

	PMO 1	PMO 2	PMO 3	PMO 4	PMO 5	PMO 6	PMO 7	 PMO 67	PMO 68	PMO 69	PMO 70
Depot A	9	X		X	X				Х		
Depot B	X				х						х
Depot C		Х			Х					Х	
Depot D	Х	-									
Depot E						Х		х	Х	X	
Depot F	- 31		X	X				х			
Depot G	10		Х								
Depot H	R						х			Х	
Depot I	4	1,1120	5.85 %			Х	х				х
Depot J	1111					Х		T			
Depot K				Х					> 8		х
Depot L	X	1	400					х			



- Examples of early planning requirements:
  - As-is process mapping
  - Linking depot to UID Registry
  - Establishing the uniqueness of UID data elements
  - Establishing the local UID AIS/data base
  - Establishing the capability to physically mark parts
  - Drawing change process
  - Engineering analysis for marking approval
  - Modifying shop routers

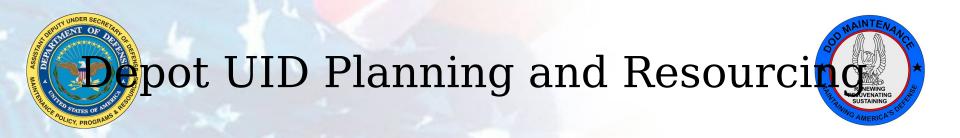


#### UID Resourcing Challenge:

- Tactical Resourcing
  - What parts will the depot be required to mark (workload forecast)?
  - What does the depot need to do to develop the capability to execute the forecasted workload, and how much will it cost (non-recurring investment)?
  - What does the depot need to do to actually execute the workload, and how much will it cost (recurring expenses)?
- Strategic Resourcing
  - Which Service accounts will be used to reimburse the depots for their UID costs?

# pot UID Planning and Resourcing SUSTAINING S

- Depot UID Costs which Services Must Fund (examples):
  - Non-Recurring UID Planning
  - Non-Recurring UID Capability Establishment
  - Recurring Engineering Analysis (to determine where and how to mark items)
  - Recurring UID Data Acquisition (to build "birth records")
  - Recurring UID Labor & Material (to mark items)
  - Recurring UID Data Management/Data Maintenance (to transact and capitalize on UID data)
  - Recurring Commercial Contracts (if any)



- Alternative Strategies for Resourcing Depot UID:
  - UID parts marking is a Program requirement to be funded by the cognizant Program Manager or other acquisition agent (e.g., Commodity Manager, Item Manager)
  - UID parts marking is an Operational requirement (because the ROI on UID/SIM investment accrues to the Warfighter) to be funded out of Service O&M accounts.
  - UID parts marking is a normal part of the depot manufacturing/repair/rework process to be funded the same as current depot workload



## Standard Approach to Funding Depot Work



#### Program Office funds

- Non-recurring investment in Depot capability establishment
  - Includes parts marking equipment & initial training
  - Includes UID data processing/data management AIS procurement/upgrade
  - Reliability improvement and non-depot sustainment processes
- Recurring cost of engineering support to parts marking
  - approving marking method (label or DPM)
  - Approving marking technology, location
  - Maintaining drawings & technical documentation
- Recurring cost of analyzing UID data in search of opportunities to improve material readiness and/or reduce sustainment cost

#### Depot funds

- Recurring cost of marking parts and obtaining & transacting UID data
   (UID labor & materiel added to the current cost of item repair/rework IAW change to item rework SPEC)\*
- Non-recurring investment in depot process improvements required to actually improve material readiness and/or reduce sustainment cost

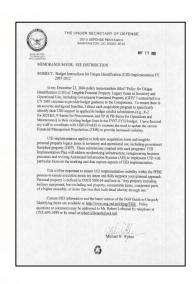


## OSD UID Resourcing Guidance

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Budget guidance to Program Offices Provided in AT&L Policy Memo dtd. 11 May, 2005 (Appendix D).





## Chapter 3: Establishing Depot UID Capability



- Joint PMO/Depot UID IPT Responsibilities
  - Identifying what to mark
- UID Engineering WIPT
  - Determining where and how to mark items
    - Engineering analysis
    - Cost analysis
  - Engineering drawing changes and configuration control
- UID AIS/Database WIPT
  - Business process analysis
  - Alternative AIS architectures
  - Serial number schema and control
    - New parts
    - Legacy parts
  - New process definitions
  - AIS interface issues



# Chapter 3: Establishing Depot UID Capability



- UID Production Integration WIPT
  - Inserting UID into the production process
  - Improving the production process with UID data
- Populating the UID Registry
  - Associating Unique Item Information with the UID mark
- The Virtual UID Concept
- Tracking Marked Parts the Bridge to SIM

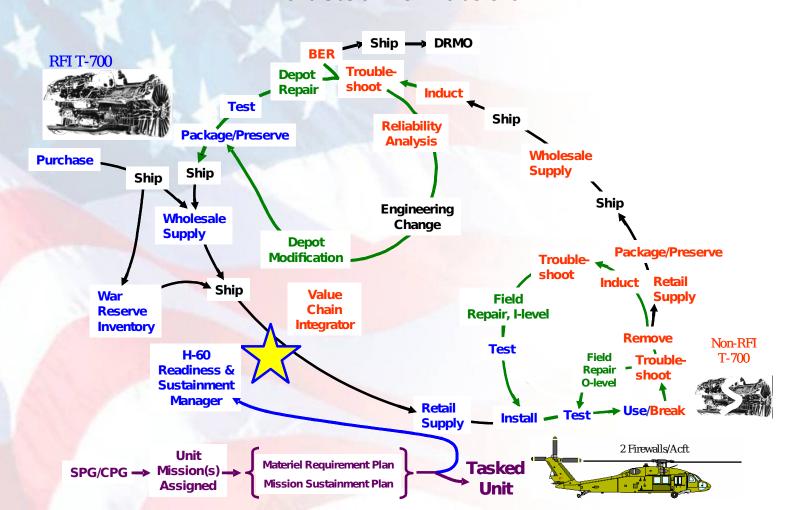
- Assign management responsibilities & delegate **PMO** authority PMO/Depot IPT Identify which items need to be marked PMO/Depot IPT Plan and budget for UID marking capability Depot Develop the capability to mark items Cog. TA\* Determine where and how to apply the UID mark Depot Mark designated items Depot Obtain UID data for each individual item marked Depot Transact data to the UID Registry and other DSSs PMO/Depot
- Do something with the mark (to generate an ROI)



# Do Something With the Mark - the Bridge to SIM



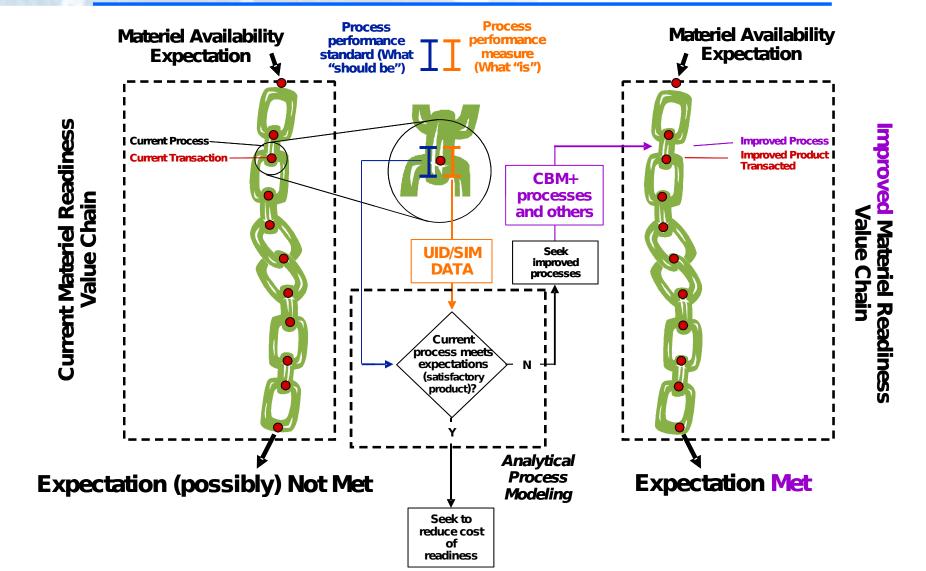
Notional H-60 End-to-End Materiel Readiness and Sustainment Value Chain





## Do Something With the Mark - the Bridge to SIM







## Next Steps



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December document will present an opportunity to further develop the SIM vision and bring Field maintenance activities into UID planning.

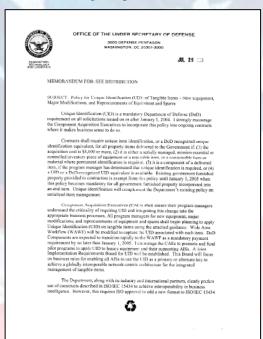




## Back-up Slides

# Two UID "PPE Populations": ew Tangible Items & Legacy Items ew Tangible Items

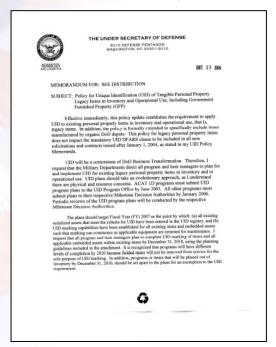
#### USD(AT&L) Policy Memo 29 July, 2003



#### New tangible items

- Begin NLT 1 Jan 2004
  - commercial purchases
- Begin NLT 1 Jan 2005
  - depot manufactured items

## USD(AT&L) Policy Memo 23 December, 2004



- Legacy items in inventory
  - IOC Jul 2005
    - pilot depots
  - Complete NLT Sep 2007
    - all existing serialized items
  - Complete all items NLT Dec 2010

# Strategic Plan Data Is Required for Informed Decision Making

### **OSD and DoD Components**

- Document mission-based materiel readiness requirements
- Resource to efficiently achieve and sustain planned materiel availability in support of required readiness
- Evaluate the performance of the sustainment value chain
- If performance matches plan, seek to reduce the cost of sustainment; if performance is below plan, seek to increase value chain performance

## Five Pillars for Sustaining Materiel Readiness

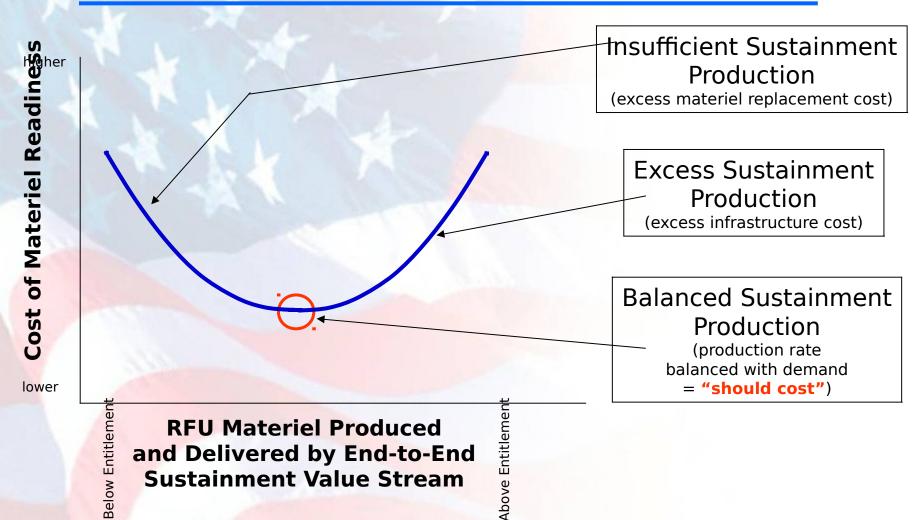
- Policy
- Measuring materiel readiness
- Optimizing materiel reliability
- Optimizing sustainment turnaround time/cycle time
- Balancing resources





### **Optimizing Sustainment Costs How much should Materiel Readiness cost?**





Sustainment Value Stream